

REMARKS/ARGUMENTS

In the Office Action mailed December 23, 2009, claims 1 – 5 were rejected. In response, Applicant has amended claim 1 and added new claims 6 – 19. Applicant hereby requests reconsideration of the application in view of the amended claims, the new claims and the below-provided remarks.

Claim Rejections under 35 U.S.C. 102

Claims 1-5 were rejected under 35 U.S.C. 102(b) as being anticipated by Saran et al. (U.S. Pat. No. 6,143,396, hereinafter Saran). However, Applicant respectfully submits that these claims are patentable over Saran for the reasons provided below.

Independent Claim 1

Claim 1 has been amended to particularly point out that the open grid structure “exposes the doped silicon substrate to direct contact with the inner connection metallization.” Support for the amendment is found in Applicant’s specification at, for example, paragraphs [0027], [0028], [0029], [0075], and [0076] (U.S. Pat. Pub. No. 2008/0230920 A1). As amended claim 1 recites:

“A semiconductor component comprising a semiconductor chip made of a doped silicon substrate, which chip is doped into a semiconductor device and structured, and comprises an inner connection metallization in a contact window, and said inner connection metallization of said semiconductor chip is connected to a respective outer connection metallization by a wire bond connection, characterized in that the inner connection metallization comprises a reinforcing system having an open grid structure on the doped silicon substrate, wherein the open grid structure exposes the doped silicon substrate to direct contact with the inner connection metallization.” (emphasis added)

In contrast to amended claim 1, Saran discloses a reinforcing system that does not expose the doped silicon substrate to direct contact with the inner connection metal. With reference to Fig. 1 of Saran, the lower reinforcement structure (30) is formed by a first dielectric layer (32) that completely separates the weak dielectric layer (34) (i.e., conductive layer) from the silicon substrate. Because the lower reinforcement structure (30) of Saran is formed by a first dielectric layer (32) that completely separates the weak

dielectric layer (34) (i.e., conductive layer) from the silicon substrate, Applicant asserts that Saran does not disclose a reinforcing system having an open grid structure that “exposes the doped silicon substrate to direct contact with the inner connection metallization” as recited in amended claim 1.

Therefore, Applicant asserts that claim 1 is not anticipated by Saran.

Dependent Claims 2 – 5

Claims 2 – 5 depend from and incorporate all of the limitations of claim 1. Applicant respectfully asserts claims 2 – 5 are allowable at least based on an allowable base claim.

New Claims 6 – 19

New claim 6 recites in part “wherein the open grid structure comprises grid lands and wherein a ratio of height, h, to width, b, of the grid lands is in the range of 1:25 to 1:50.” Support for new claim 6 is provided in Applicant’s specification at, for example, paragraph [0046].

New claim 7 recites in part “wherein the open grid structure comprises grid lands and grid openings and wherein the ratio between the area of the grid lands and the area of the grid openings is greater than 70%.” Support for new claim 7 is provided in Applicant’s specification at, for example, paragraph [0046].

New claim 8 recites in part “wherein the open grid structure of the reinforcing system comprises oxide lands formed directly on the doped silicon substrate.” Support for new claim 8 is provided in Applicant’s specification at, for example, paragraphs [0054], [0067], and [0068].

New claim 9 is similar to claim 1, as originally filed, except that new claim 9 particularly points out that the open grid structure “forms at least one opening within which the inner connection metallization is in direct contact with the doped silicon substrate.” Support for claim 9 is found in Applicant’s specification at, for example, paragraphs [0027], [0028], [0029], [0075], and [0076]. As described above, Saran discloses a reinforcing system that does include openings that allow the silicon substrate to be in direct contact with the weak dielectric layer (34) (i.e., conductive layer).

Because Saran discloses a reinforcing system that does not include openings that allow the silicon substrate to be in direct contact with the weak dielectric layer (34) (i.e., conductive layer), Applicant asserts that Saran does not disclose a reinforcing system having an open grid structure that “exposes the doped silicon substrate to direct contact with the inner connection metallization” as recited in new claim 9.

New claims 10 – 13 are dependent on claim 9 and are similar to claims 2 – 5 as originally filed.

New claim 14 is an independent claim. Support for claim 14 is found in Applicant’s specification at, for example, paragraphs [0027], [0028], [0029], [0075], and [0076].

New claims 15 – 18 are dependent on claim 9 and are similar to claims 2 – 5 as originally filed.

New claim 19 is similar to new claim 8.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the amended claim, the new claims, and the remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-4019** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-4019** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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